

## Remarks

### I. Status of the Application and Claims

No claims were cancelled or added herein. The claims presently under consideration are claims 5-24.

### II. The Amendments

No amendments have been made herein.

## The Rejections

The Examiner has maintained a rejection of all pending claims as being obvious over Dormoy, *et al.* (*Synthesis*, pg. 81-86 (1996)), in view of Carlsen, *et al.*, (*J. Org. Chem.* 46:3936-3938 (1981)) and Riley, *et al.* (*J. Chem. Soc., Chem. Commun.*, 1530-1532 (1983)) and further in view of Narukawa, *et al.* (*Tetrahedron* 53:539-556 (1997)).

Applicants have traversed this rejection and respond to the comments made by the Examiner below.

The ketoprolines produced by the processes claimed in the present application have a tendency to undergo further reaction and must therefore be stabilized in order to avoid the accumulation of unwanted side products. Applicants have accomplished this stabilization by inducing the precipitation of ketoproline at the same time that oxidizing agent is being added to the reaction mix. None of the references cited by the Examiner suggest either stabilizing or purifying product in this manner.

The Examiner argues that, if a motivation to use a procedure exists in the prior art, then the fact that a claim may be using the same procedure for a different purpose is not an important consideration with respect to obviousness. Since there is, allegedly, a motivation to crystallize Applicants' products in the cited prior art (or in the prior art generally) as a purification step, the Examiner argues that the fact that Applicants used crystallization for stabilization is irrelevant to patentability.

In response, Applicants submit that crystallization performed for *any purpose* during the addition of oxidizing agent is a concept that is entirely missing from the references either when considered alone or in combination. The only basis that the Examiner has provided for alleging that this element is obvious appears to be that crystallization is a purification procedure that is known in the art. However, crystallization is one of many procedures that can be used in the purification of compounds and the Examiner has not provided an explanation as to why one of skill in the art would select this particular procedure from those available and use it at the same time that oxidizing agent is being added to a reaction mixture rather than, for example, after the formation of product is complete. In the references cited, it appears that the procedures primarily used for purification is not crystallization, but rather extraction and chromatography.

It should also be noted that the time at which crystallization is performed is an important part of the claimed process. Applicants crystallize product rapidly during its formation in order to prevent compounds from undergoing further reaction. If one were performing crystallization to purify product, it is not clear why it would be necessary, or desirable, to perform this step concurrently with the addition of reagent. It should be noted that Applicant has not merely changed the order in which the steps of a disclosed procedure are performed; the concept of crystallizing product rapidly during its formation is entirely missing from the references cited.

Beyond this, Applicants do not believe that the Examiner has reasonably explained what motivation would exist for combining references that stabilize products by separation in a two phase system (*e.g.*, Dormoy and Carlsen) with a reference (Riley) that uses a one phase system but that does not provide a reasonable alternative for stabilizing these products. Applicants do not believe that a justification for combination can be found in Narukawa or that there are any teachings in any of the references that would lead to the stabilization method that is used in Applicants' claims.

Overall, it is Applicants' position that the Examiner has failed to provide a reasonable explanation as to how one gets from the cited references to a process that has all of the

important elements present in Applicants' claims. Applicants therefore respectfully submit that prima facie obviousness has not been validly established.

### **Conclusion**

In light of the discussion above, Applicants respectfully submit that a prima facie case of obviousness has not established. It is therefore requested that the rejection of claims be withdrawn and that the present application be passed to allowance.

If, in the opinion of the Examiner, a phone call may help to expedite the prosecution of this application, the Examiner is invited to call Applicants' undersigned attorney at (240)683-6165.

Respectfully submitted,  
Law Office of Michael A. Sanzo, LLC

By: /Michael A. Sanzo/  
Michael A. Sanzo  
Reg. No. 36,912  
Attorney for Applicants

Date: June 10, 2010  
15400 Calhoun Drive, Suite 125  
Rockville, Md. 20855  
(240)683-6165